



PRODUCT DATASHEET

TEK 3 SCREW HEX HEAD

Product Details

Designed for: *Fixing cladding/roofing applications to hot/cold rolled purlins/rails. Fastening liner panels and general components to steel.*

Head style: *Hexagonal*

Drive bit: *5/16" hexagonal*

Thread form: *Single, Coarse thread (Tek 3)*

Shank material: *Carbon steel*

Material grade: *AISI C1022*

Coating: *500hr Evoshield®*

Tek 3 range – for light steel

Product Code	Size	Drill point	Effective thread length	Drilling Capacity	Recommended drill speed
TSHW4.8-16-3	4.8x16mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-19-3	5.5x19mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-25-3	5.5x25mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-32-3	5.5x32mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-38-3	5.5x38mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-50-3	5.5x50mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-60-3	5.5x60mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-75-3	5.5x75mm	Tek 3	FULL	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-100-3	5.5x100mm	Tek 3	80mm	1.2 – 4.0mm	1500-2500 RPM
TSHW5.5-125-3	5.5x125mm	Tek 3	80mm	1.2 – 4.0mm	1500-2500 RPM

Technical Data

Tek 3 range – Unfactored pull out values

Diameter	Drill point	Steel Thickness					
		1.2mm	1.6mm	2.0mm	2.5mm	3.0mm	4.0mm
4.8mm	Tek 3	1.2kN	1.6kN	2.0kN	3.0kN	3.9kN	4.5kN
5.5mm	Tek 3	1.7kN	1.9kN	2.4kN	4.6kN	6.5kN	7.6kN

Hardness Rating (Vickers scale)			Ultimate Mechanical Performance			Pullover Performance		
Diameter	Surface Hardness	Core Hardness	Diameter	Tensile Strength	Shear Strength	Diameter	In 0.6mm steel	In 1.2mm steel
4.8mm	630.0HV	445.0HV	4.8mm	9.5kN	13.8kN	4.8mm	2.8kN	3.6kN
5.5mm	615.5HV	440.0HV	5.5mm	15.9kN	12.2kN	5.5mm	3.0kN	4.4kN

NOTE: The results expressed in the datasheet are taken as mean loads from a range of empirical tests and are ultimate unfactored loads. Each specifier or end user should make his/ her own decision on what safety factors to use relevant to their design application (such as BS 5950, EN 1991, etc).

Errors and Omissions Excepted.



ABOUT OUR TESTING

All test results were derived from empirical testing performed by ETAS (Evolution Testing & Analytical Services), a UKAS (United Kingdom Accreditation Service) accredited testing laboratory (Accreditation No. 7485). The following tests were performed to the following standards.

Testing Procedures

Test/ Parameter	Standard/ Method/ Procedure
Ultimate Tensile	ISO 6892-1: 2009 <i>"Metallic materials – tensile testing – Part 1: Method of test at room temperature".</i>
Ultimate Shear	MIL-STD-1312-13 <i>"Military Standard: Fastener test method (Method 13) Double shear test".</i>
Pull Out (Withdrawal Force)	EN 14566: 2009 <i>"Mechanical fasteners for gypsum plasterboard systems. Definitions, requirements and test methods".</i>
Pull Over	EN 14592: 2008 <i>"Timber structures. Dowel type fasteners. Requirements".</i>
Hardness	ISO 650 7-1: 2005 <i>"Metallic materials – Vickers hardness test – Part 1: Test method".</i>
Corrosion Resistance	EN ISO 9227: 2012 <i>"Corrosion tests in artificial atmospheres. Salt spray tests".</i>
Drilling Time Test	EN 14566: 2009 <i>"Mechanical fasteners for gypsum plasterboard systems. Definitions, requirements and test methods".</i>

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